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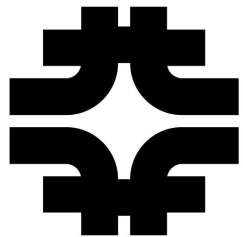
**Phil Adamson**  
Fermilab Accelerator Division



# Main Injector Weekly Summary

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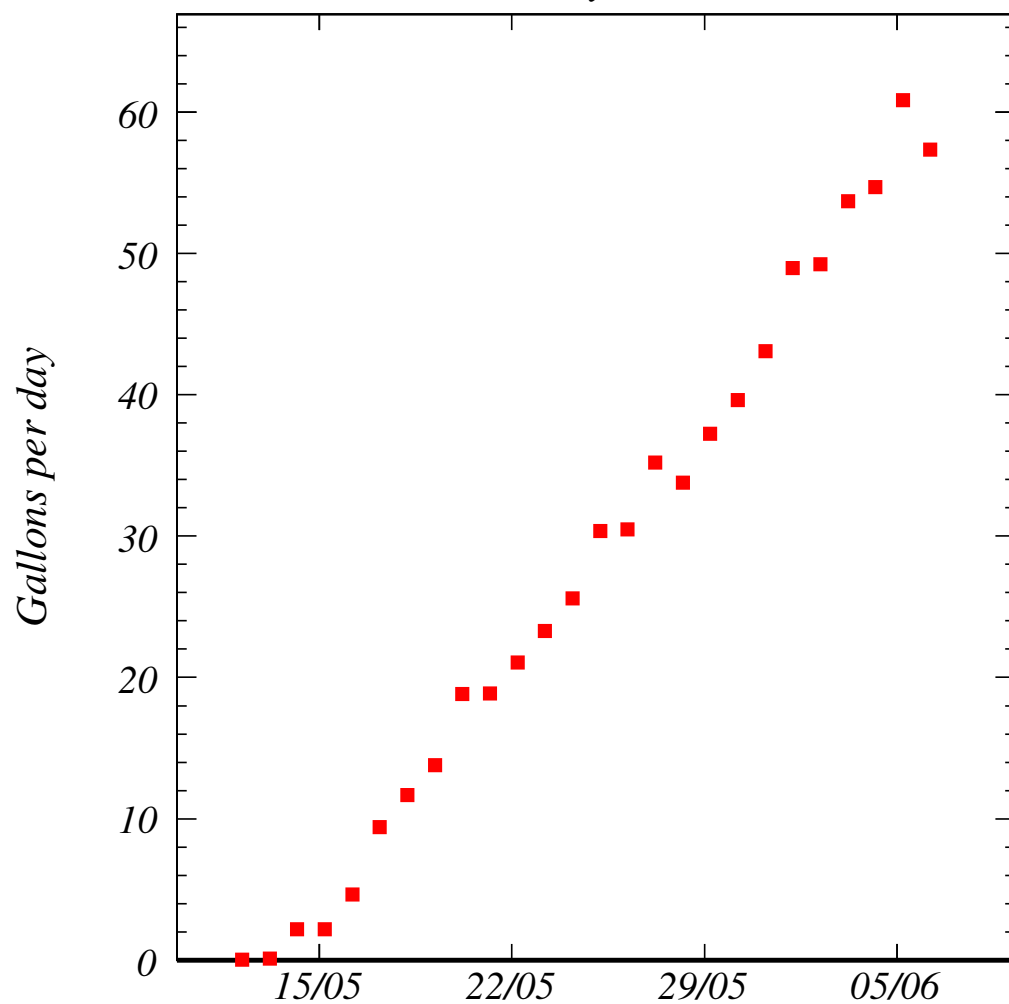
Friday 8th June 2007



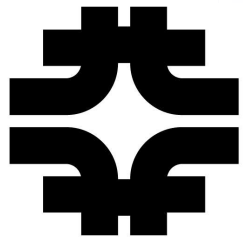
# Water Leak

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Accelerator Division  
Fermilab

*MI RF Cavity Water Leak*

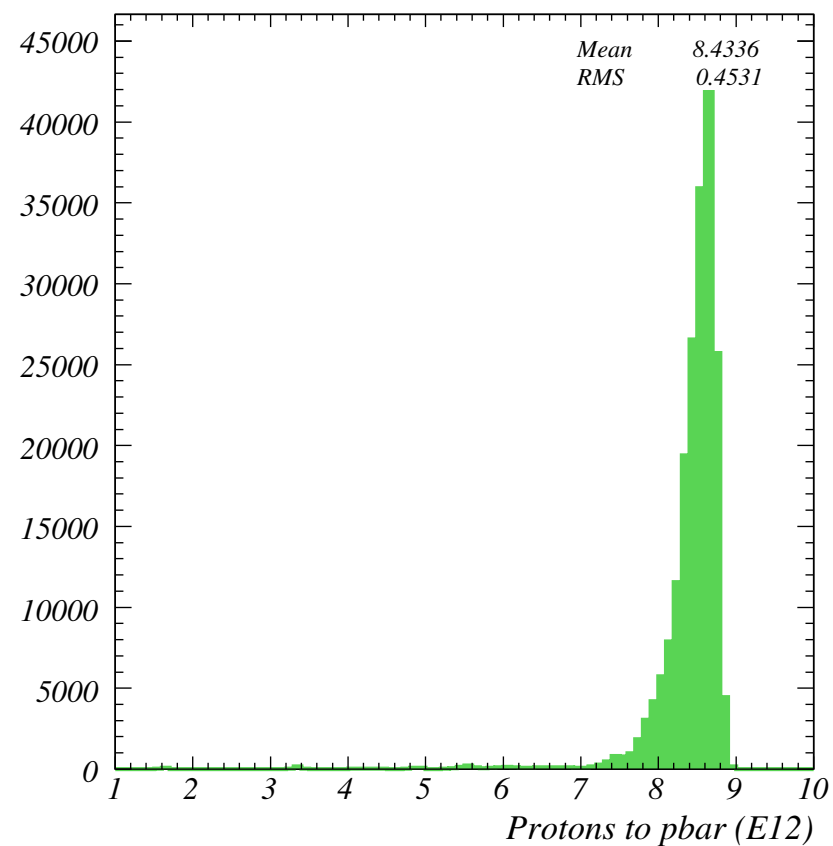
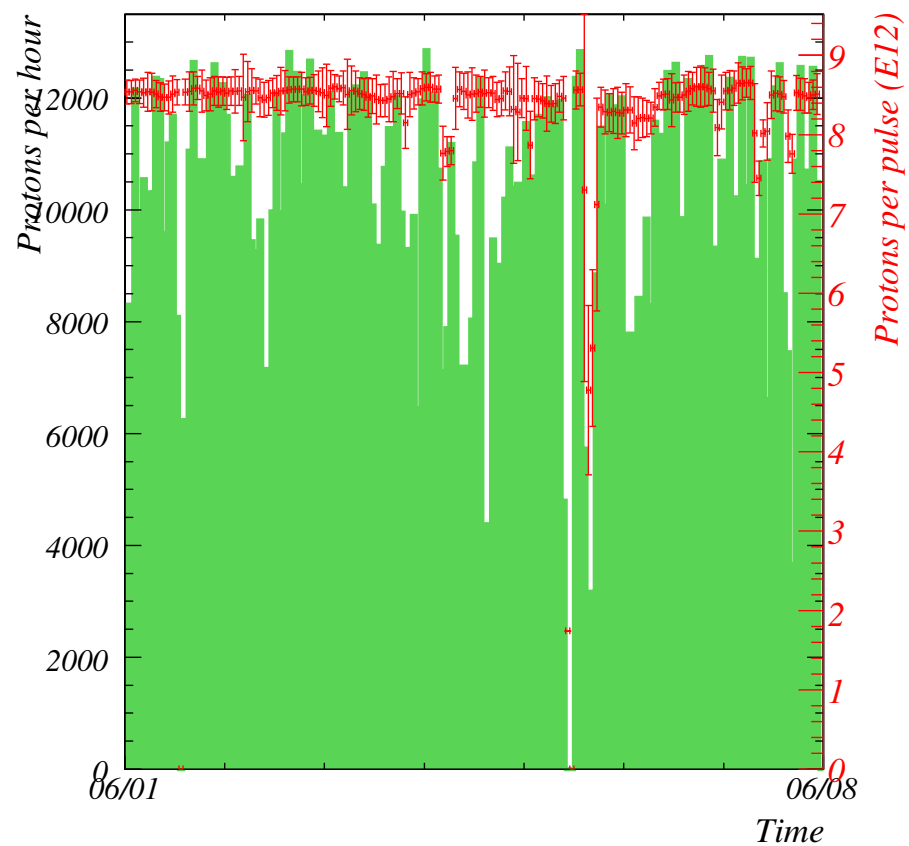


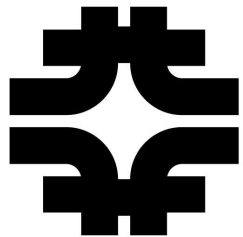
- ▷ Water leak is steadily getting worse
- ▷ Both cavity and main MI LCW systems topped off last night
- ▷ Top off cavity system again at close of play today—should last till Monday morning
- ▷ Currently takes 4 days to completely drain the system
- ▷ In a week, it will take 3 days
- ▷ Need to fix next week!



# Pbar

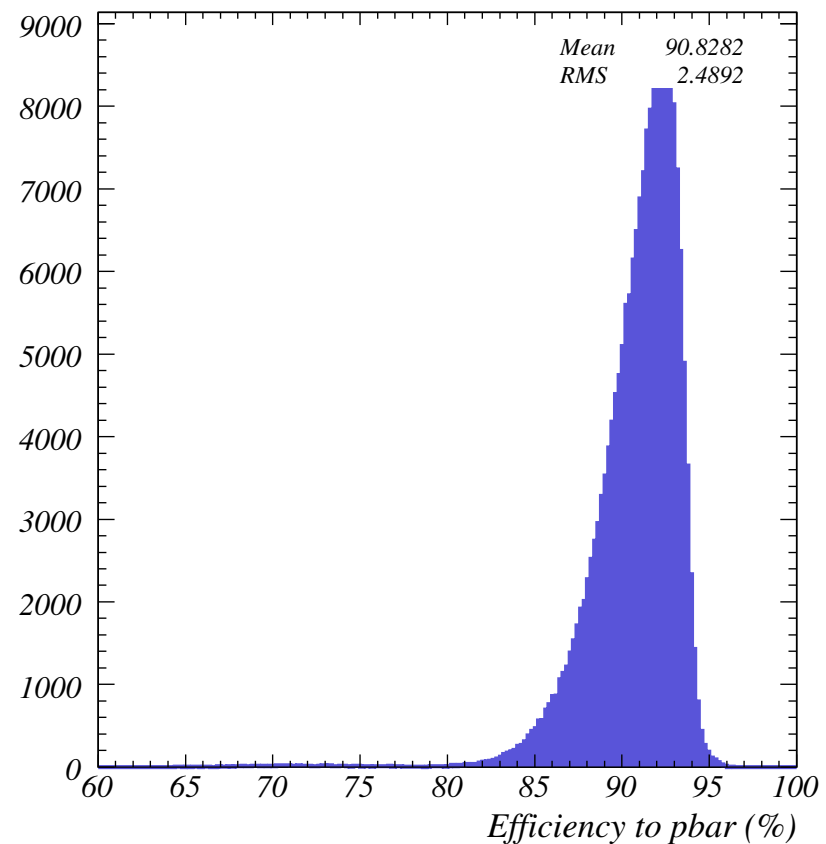
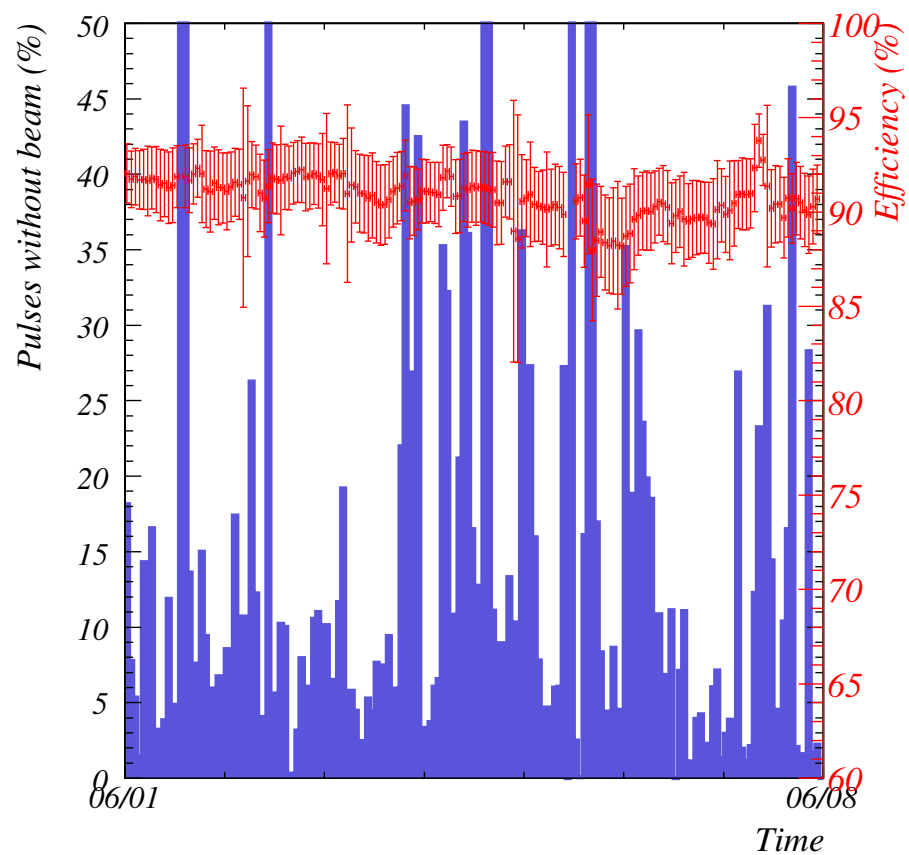
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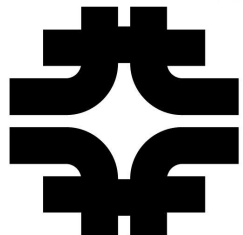




# Pbar

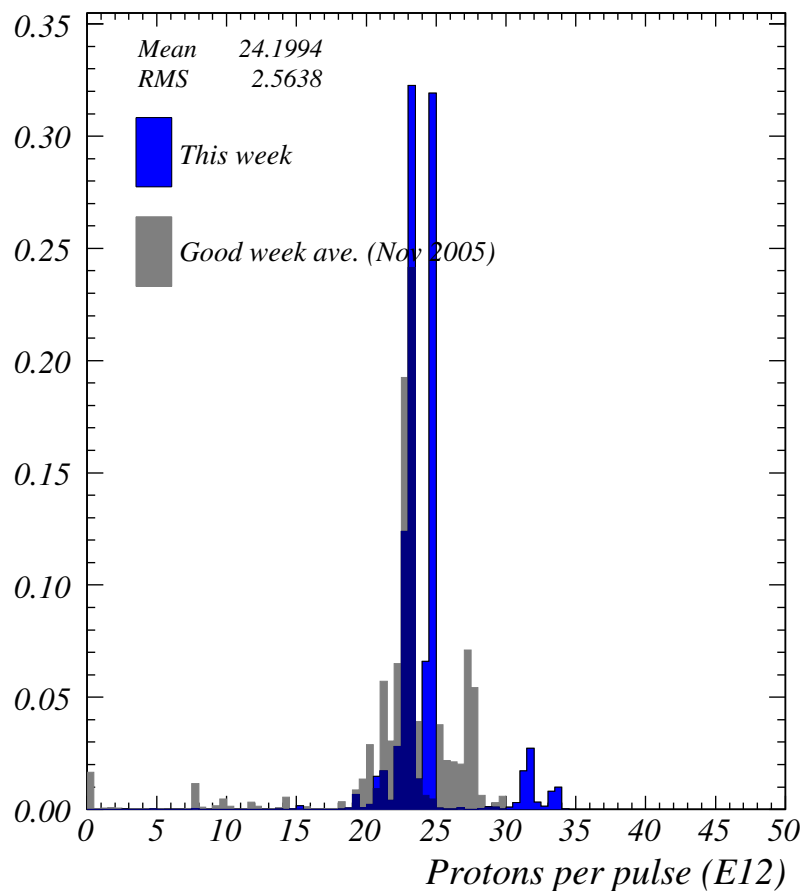
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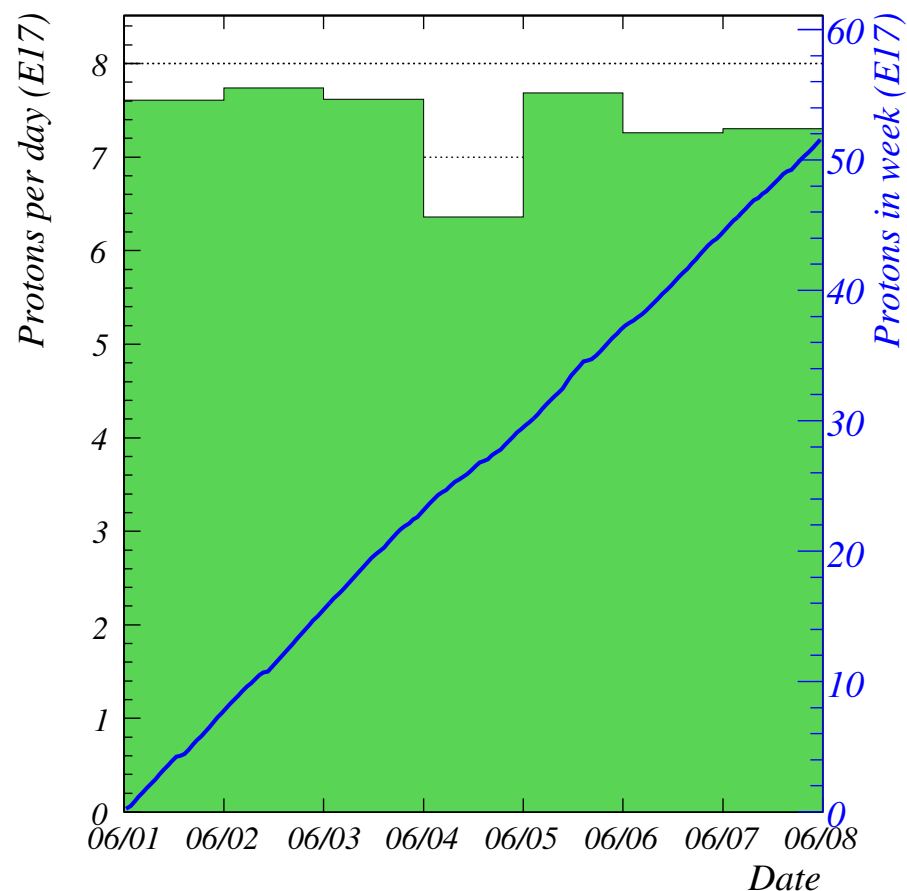


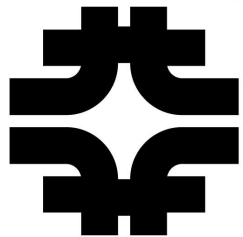
- ▷ Down a turn second half of week  
(Booster RF)

Week ending 00:00 Friday 08 June 2007



Week to 00:00 Friday 08 June 2007

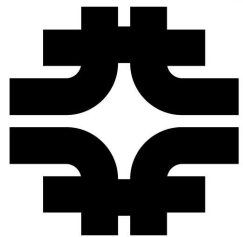




# Access Jobs

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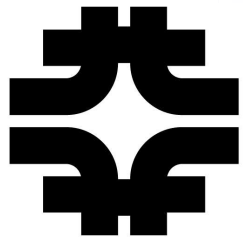
- ▶ Change permit arrangement at M18 (for collimator aborts)
- ▶ Fix RF water leak
- ▶ Inspect and measure for new beam pipe pieces
- ▶ Rad survey
- ▶ Tunnel tour / several “go and look” jobs



# Studies

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- ▷ 11-batch slip-stacking (Seiya)
  - ⇒ Studies continued, and will continue
- ▷ \$2A de-accumulation (Morris)
  - ⇒ New \$2A ramp ready to go
  - ⇒ Wait for a day-time shot setup on a non-Friday
- ▷ 11-batch mixed-mode to pbar and NuMI targets (all)
  - ⇒ Study for a couple of hours to make sure things work
  - ⇒ One iteration completed—able to run at 8 turns (stacking 15-16 mA/h) but no higher, due to losses in AP1.
  - ⇒ Improve things with \$2E study, then ask for another one.
  - ⇒ Want to run in this mode for a week well before the shutdown.

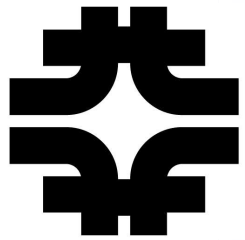


# More Studies

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- ▶ M18 collimator studies (Brown)
  - ⇒ Small amount of scraping, parasitic
- ▶ M1 ring collimator study (Johnson, Yang, Brown)
  - ⇒ 2 hours with a 0.5s \$2E every 15-20s
  - ⇒ Measure loss distribution from primary collimator, compare with simulation
  - ⇒ Data analysis underway
- ▶ Barrier stacking (Chou, Wildman)
- ▶ 150 GeV lattice measurements (Yang)





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# Main Injector Weekly Summary

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Friday 8th June 2007